

December 2, 2003

Mr. Stephen Smith, Director, Facilities Services
Saint Vincent Hospital and Health Services
2001 West 86th Street
Indianapolis, IN 46240

Re: Significant Source Modification 097-17256-00129 and Significant Permit Revision 097-17919-00129
to Part 70 permit No.: T097-7469-00129

Dear Mr. Stephen Smith:

Saint Vincent Hospital and Health Services was issued a Part 70 operating permit T097-7469-00129 on May 24, 2000 for a general medical and surgical hospital. Applications to modify the source were received on May 13, 2003 and May 30, 2003. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) One (1) steam boiler, identified as EU-04, capable of burning natural gas and #2 fuel oil, with a maximum capacity of 34.8 MMBtu/hr when burning #2 fuel oil and 36.5 MMBtu/hr when burning natural gas, with a low NO_x burner, and exhausting to stack 4.
- (b) One (1) fuel oil fired emergency generator, identified as Emergency Generator #3 (EU-08), with a maximum capacity of 13.6 MMBtu/hr and exhausting to stack 08.

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

Pursuant to 326 IAC 2-7-12(d), a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document and modified Part 70 Operating Permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call Amanda Hennessy at 327-2510.

Sincerely,

Original Signed by John B. Chavez

John B. Chavez
Administrator

Enclosures: Technical Support Document
Revised Part 70 Operating Permit

ajh

cc: File
U.S. EPA, Region V
IDEM, OAQ - Mindy Hahn
Air Compliance - Matt Mosier
Air Permits - Amanda Hennessy

**Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services**

Addendum to the Technical Support Document for a Significant Permit Revision
to a Part 70 Operating Permit

Source Name:	Saint Vincent Hospital and Health Services
Source Location:	2001 West 86th Street, Indianapolis, IN 46240
County:	Marion
SIC Code:	8062
Operation Permit No.:	T097-7469-00129
Significant Permit Revision No.:	SPR097-17919-00129
Significant Source Modification No.:	SSM097-17256-00129
Permit Reviewer:	Amanda Hennessy

On September 25, 2003, the Office of Air Quality (OAQ) and the Office of Environmental Services (OES) had a notice published in the Indianapolis Star stating that Saint Vincent Hospital and Health Services had applied for a Significant Source Modification and Significant Permit Revision to a Part 70 Operating Permit for a new emergency generator and a new boiler. The notice also stated that OAQ and OES proposed to issue a permit revision for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 21, 2003, Saint Vincent Hospital and Health Services submitted comments on the proposed Part 70 permit. The summary of the comments is as follows:

Comment 1:

The only corrections we saw on the Permit draft are some minor details in the Table of Contents:

- D.1.4 Preventive Maintenance Plan
- D.1.5 Testing Requirements
- D.1.6 Sulfur Dioxide Emissions and Sulfur Content
- D.1.7 Opacity

Certification	Page 35
Emergency / Deviation Occurrence Report	Page 36
Natural Gas Fired Boiler Certification	Page 38
Semi-Annual Report	Page 39
Semi-Annual Compliance Monitoring Report	Page 40
Attachment A	Page 41

Response to Comment 1:

IDEM and OES agree. The following changes have been made in the Table of Contents:

D.1 FACILITY OPERATION CONDITIONS - Five (5) Natural Gas/ #2 Fuel Oil Fired Boilers and Three (3) Emergency Generators	30
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Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 SO₂ Emissions Limitations [326 IAC 7-1.1-2(a)(3)] [40 CFR 60, Subpart Dc] [40 CFR 60,

Subpart A]

- D.1.2 Particulate Matter [326 IAC 6-1-12]
- D.1.3 Particulate Matter [326 IAC 6-2-4]
- ~~D.1.4 Opacity [40 CFR Part 60.43c]~~
- D.1.54 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.65 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
- D.1.76 Sulfur Dioxide Emissions and Sulfur Content

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

- D.1.7 Opacity Monitoring under 40 CFR 60, Subpart Dc**
- D.1.8 Visible Emissions Notations

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.9 Record Keeping Requirements
- D.1.10 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS - Insignificant Activities 34

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 Particulate Matter [326 IAC 6-2-4]

Compliance Determination Requirements

- D.2.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Certification	4035
Emergency/Deviation Occurrence Report	4136
Natural Gas Fired Boiler Certification	4338
Semi-Annual Report	4439
Semi-Annual Compliance Monitoring Report	4540
Attachment A (state rules adopted by reference)	4641

**Indiana Department of Environmental Management
Office of Air Quality
and
Indianapolis Office of Environmental Services**

Technical Support Document (TSD) for a
Part 70 Significant Source Modification
and
Part 70 Significant Permit Revision

Source Background and Description

Source Name:	Saint Vincent Hospital and Health Services
Source Location:	2001 W. 86th Street
County:	Marion
SIC Code:	8062
Operation Permit No.:	T 097-7469-00129
Operation Permit Issuance Date:	5-24-2000
Significant Source Modification No.:	SSM097-17256-00129
Significant Permit Revision No.:	SPR-097-17919-00129
Permit Reviewer:	Amanda Hennessy

The Office of Air Quality (OAQ) has reviewed a modification application from Saint Vincent Hospital and Health Services relating to the construction of the following emission units and pollution control devices:

- (a) One (1) steam boiler, identified as EU-04, capable of burning natural gas and #2 fuel oil, with a maximum capacity of 34.8 MMBtu/hr when burning #2 fuel oil and 36.5 MMBtu/hr when burning natural gas, with a low NO_x burner, and exhausting to stack 04.
- (b) One (1) fuel oil fired emergency generator, identified as Emergency Generator #4, with a maximum capacity of 13.6 MMBtu/hr and exhausting to stack 12.

This approval combines both construction approval (SSM097-17256-00129) and the associated permit revision (SPR097-17919-00129) for the new steam boiler and the fuel oil fired emergency generator. Both approvals are taking place concurrently so that the fuel usage limit in the original Part 70 Permit can be corrected. This must be corrected in order for the construction of the steam boiler to be approved as minor for PSD.

History

On May 13 and May 30, 2003, Saint Vincent submitted applications to the OES requesting to add one boiler and one emergency generator. Saint Vincent Hospital and Health Services was issued a Part 70 permit on May 24, 2000.

Since the time of the original permit issuance, the source has removed Emission Units 4 (waste heat boiler), 5 (insignificant EU5 - fuel side of waste heat boiler), 11 (emergency generator 3), 9 (emergency generator 1), 10 (emergency generator 2), 12 (emergency generator 4), and 7 (medical waste incinerator). The source indicated in a phone conversation that they would like for the new boiler to be identified as EU-04 (their letter / application referred to the new unit as EU-16). The

source also has asked for many of the existing emission units to be renumbered. The new emergency generator will replace the removed emergency generator #4 and will be identified as emergency generator #4.

Enforcement Issue

- (a) OES is aware that the emergency generator has been constructed and operated prior to receipt of the proper permit. OES is aware that the source has begun construction of the boiler prior to receipt of the proper permit.
- (b) OES is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
04	boiler	33	2	13,100	338
08	emergency generator	34	1	12177	939

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 13 and 30, 2003. Additional information was received on July 23, 2003.

Emission Calculations

See Appendix A (pages 1-4) of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	3.3
PM-10	2.3
SO ₂	78.3
VOC	2.1
CO	16.6

NO _x	36.8
HAP's	Potential To Emit (tons/year)
TOTAL	negligible

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(g). The requirements of 326 IAC 2-7-10.5(g) apply to modifications described under 326 IAC 2-7-10.5(f). This modification falls under 326 IAC 2-7-10.5(f)(4)(C) and (B) because the potential to emit of NO_x and SO₂ from the modification is greater than 25 tons per year.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	unclassifiable
SO ₂	maintenance attainment
NO ₂	attainment
Ozone	maintenance attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Marion County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Marion County has been classified as attainment or unclassifiable for PM10, NO_x, SO₂ and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	< 250
PM-10	< 250
SO ₂	< 250
VOC	< 250
CO	< 250

NOx	< 250
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- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon calculations done for this source modification and considering the federally enforceable PM limit from the original Part 70 permit. The PM limit of 0.7 tons per year of PM from each boiler EU-01, EU-02 and EU-03 limits SO₂ to 25 tons per year from each boiler. Therefore, total potential to emit of SO₂ is less than 250 tons per year. Due to the removal of certain equipment at this source, potential emissions were recalculated prior to issuance of this source and permit modification.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Boiler (EU-04)	2.2	1.2	77.3	0.9	13.4	21.8	Negligible
Emergency Generator #3 (EU-08)	1.1*	1.1	1	1.2	3.2	15	Negligible
PSD Major Source Level	250	250	250	250	250	250	

* There is no emission factor in AP-42 for PM, therefore, the PM10 emission factor was used.

These modifications to an existing minor stationary source are not major because the emission increases are less than the PSD major source levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

- (a) The new boiler, EU-04, is subject to the provisions of 40 CFR 60, Subpart A - General Provisions, except when otherwise specified in 40 CFR 60, Subpart Dc.
- (b) The new boiler, EU-04, is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc because it is a steam generating unit constructed after June 9, 1989 with a capacity between 10 and 100 MMBtu/hr.
 - (1) Pursuant to 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):
 - (A) The SO₂ emissions from Emission Unit 16 shall not exceed five tenths (0.5) pounds per million Btu heat input; or
 - (B) The sulfur content of the fuel oil shall not exceed five-tenths percent

(0.5%) by weight. [40 CFR 60.42c(d)]

- (2) This proposed boiler does not burn coal or wood. The boiler does have the capability to burn fuel oil and the heat input capacity is greater than 30 MMBtu/hr. Therefore, pursuant to 40 CFR 60.43c(c), opacity from EU 4 is limited to twenty percent (20%) (6 minute average) except for one six (6) minute period per hour of not more than twenty seven percent (27%) opacity.
- (3) Pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.
- (4) Pursuant to 40 CFR 60, Subpart Dc, the Permittee shall demonstrate compliance utilizing one of the following options:
 - (A) Providing vendor analysis of fuel delivered, if accompanied by a certification; or
 - (B) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (C) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (D) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (5) To document compliance, the Permittee shall maintain the following records:
 - (A) Calendar dates covered in the compliance determination period;
 - (B) Actual daily fuel oil and natural gas usage since last compliance determination period and equivalent sulfur dioxide emissions;

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

 - (C) Fuel supplier certifications;
 - (D) The name of the fuel supplier; and
 - (E) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.
- (6) The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.
- (7) The Permittee shall submit notification of the date of construction, anticipated start-up, and actual startup, as provided by 40 CFR 60.7. The notification shall include the items listed in 40 CFR 60.48c(a)(1) through (4).
- (8) The Permittee shall submit the performance test data from the initial and any subsequent performance tests.

- (8) The Permittee shall submit semi-annual reports summarizing the information necessary to demonstrate compliance with the SO₂ emission limit and/or fuel oil sulfur limit.

The boiler located at the source at the time of the original Part 70 permit issuance, identified as EU-04, has been removed. In the original Part 70 Permit, 40 CFR 60, Subpart Dc was incorrectly applied to the original EU-04 (the unit was constructed in April of 1989 which is before the applicability date of June, 1989 in the NSPS). Since this unit is no longer at the source and the applicability was in error, this condition has been removed from the permit.

- (c) EU-07 (medical waste incinerator) has been removed from the source, therefore, the NSPS 326 IAC 12 (40 CFR 60, Subpart Ce) no longer applies to this source.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

At the time of the Part 70 Permit Issuance, the source was operating an incinerator. Emissions of HCl were calculated to be around 110 tons per year, which made the source Major for HAPs (major under Section 112 of the Clean Air Act). However, this incinerator is no longer in service and HAP emissions are now less than major. Therefore, the proposed boiler MACT, which only applies to boilers located at major sources, will not apply to this new boiler or any boiler at the source.

State Rule Applicability - Individual Facilities

326 IAC 1-6-3 (Preventive Maintenance Plan)

Pursuant to 326 IAC 2-7-5(13)(A), Part 70 permits must require that the source maintain preventive maintenance plans as described in 326 IAC 1-6-3.

Based on OES's review PMPs are required for the following emission units and any control equipment required by OES and IDEM, OAQ in the permit:

- (a) EU-04, the proposed boiler, is subject to the requirement to prepare and maintain a PMP since the boiler is a significant emission unit and is subject to the steam generating NSPS, Subpart Dc.
- (b) Emergency Generator #4, the new emergency generator, is not subject to the requirement to prepare and maintain a PMP.

326 IAC 2-2 (Prevention of Significant Deterioration)

Emissions from this modification (new boiler and new emergency generator) outlined in this significant source modification do not meet the definition of "significant major source" pursuant to 326 IAC 2-2. Emissions of Clean Air Act pollutants from these modifications are less than 250 tons per year. The source is not a major PSD source and this modification is not at major source levels.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants)

The new boiler and new emergency generator are not subject to the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) because they are not in and of themselves major sources of HAPs. Potential HAP emissions from this modification are negligible.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of Nitrogen oxide (NO_x). Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year). This requirement is already outlined in the Permittee's current Part 70 operating permit.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1 (Nonattainment Area Limitations)

The source does not have potential emissions greater than 100 tons per year of particulate matter, have actual emissions greater than 10 tons per year, nor is the new boiler listed in 326 IAC 6-1-12, therefore, the requirements of 326 IAC 6-1 do not apply to the proposed boiler or proposed emergency generator.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The proposed boiler is an indirect heating facility constructed after September 21, 1983, therefore, it is subject to the requirements of 326 IAC 6-2-4.

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emissions for Sources of Indirect Heating), the PM emissions from EU-04 shall not exceed 0.2862 pound per million Btu heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Q = total source capacity (MMBtu)

Pt = Pounds of particulate matter emitted per million Btu heat input

Saint Vincent Hospital has six boilers, (EU 1 and EU 2: 29.2 MMBtu/hr each; EU3 and EU 5: 35.5 MMBtu/hr; EU 4: removed; EU 8: 5.3 MMBtu/hr; and EU 4 (new): 36.5), for a Q= 171.2 MMBtu and a Pt = 0.2862. Therefore, boiler 16 is limited to a particulate emission rate of 0.2862 lb/MMBtu.

EU-04 Compliance Determination

Worst case particulate emissions arise when burning #2 fuel oil in the boiler. Based on an AP-42 emission factor of 0.014 lb/MMBtu, this facility will be in compliance with the 0.2862 lb/MMBtu particulate limit.

326 IAC 6-4 (Fugitive Dust Emissions Limitations)

This rule requires that the source not generate fugitive dust to the extent that some portion of the material escapes beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The emergency generator has potential emissions less than 25 tons per year of SO₂, therefore the requirements of 326 IAC 7-1.1 do not apply to the emergency generator.

The new boiler, EU-04, has potential emissions greater than 25 tons per year when burning fuel oil, therefore, the requirements of 326 IAC 7-1 apply to the new boiler.

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations), the SO₂ emissions from the new boiler shall not exceed five-tenths (0.5) pound per million Btu heat input while combusting fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a calendar month average.

Compliance with this limit shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pound per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

In the original Part 70 permit, emergency generators #5 and #6 and boiler EU-08 (now EU-09) were subject to the requirements of 326 IAC 7-1.1-1. However, the potential to emit of SO₂ from each of these generators and EU-08 is less than 25 tons per year, therefore, the requirements of 326 IAC 7-1.1-1 are not applicable to these facilities. This requirement has been removed from the permit for emergency generators #5 and #6 and boiler EU-08 (now EU-09).

326 IAC 8-1-6 Volatile Organic Compounds (VOC)

The potential to emit of these new facilities is less than 25 tons per year of VOC, therefore, the requirements of 326 IAC 8-1-6 do not apply.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement

for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

1. The proposed boiler (EU-04) has applicable compliance monitoring conditions as specified below:
 - (a) Daily visible emissions notations of the boiler (EU-04) shall be performed during normal daylight operations when burning fuel oil. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed.

This monitoring condition is necessary because the boiler must operate properly to ensure compliance with 6-2 (Particulate Emissions for Facilities Constructed after September 21, 1983). Visual emissions will indicate to the source whether the units are operating properly.

2. In the original permit, visible emission notations were required for all emission units in Section D.1 when burning No. 2 fuel oil. Since there are no particulate matter emission limitations for the emergency generators listed in Section D.1, the requirement to perform visible emission notations for those units when burning fuel oil has been removed.

Proposed Changes

The permit language has been changed to read as follows (deleted language appears in ~~strikeout~~; new language appears as **bold**):

All Part 70 Operating Permit model changes made to conditions in the B and C sections have been updated.

All references to the Indiana Department of Environmental Management's Office of Air Management have been changed to Office of Air Quality.

All references to the Indianapolis Environmental Resources Management Division have been changed to Office of Environmental Services.

All changes made above have been reflected in the Table of Contents.

All reporting forms have been changed to reflect the removal of emission units and the addition of the new boiler.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) 29.2 mmBtu Zurn natural gas and Number 2 fuel oil fired boiler, constructed in 1971, identified as EU-01, exhausting to stack/vent ID 01 with a production capacity of 24,000 pounds per hour of steam.
- (b) One (1) 29.2 mmBtu Zurn natural gas and Number 2 fuel oil fired boiler, constructed in 1971, identified as EU-02, exhausting to stack/vent ID 02 with a production capacity of 24,000 pounds per hour of steam.
- (c) One (1) 35.5 mmBtu Zurn natural gas and Number 2 fuel oil fired boiler, constructed in 1987, identified as EU-03, exhausting to stack/vent ID 03 with a production capacity of 30,000 pounds per hour of steam.
- (d) ~~One (1) 11.25 mmBtu Superior Waste Gas and Number 2 fuel oil fired boiler, constructed in April 1989, identified as EU-04, exhausting to stack/vent ID 04 and 05 with a production capacity of 7,488 pounds per hour of steam.~~ **One (1) steam boiler, identified as EU-04, capable of burning natural gas and #2 fuel oil, with a maximum capacity of 34.8 MMBtu/hr when burning #2 fuel oil and 36.5 MMBtu/hr when burning natural gas, with a low NOx burner, and exhausting to stack 04.**
- (e) One (1) 35.5 mmBtu Zurn natural gas and Number 2 fuel oil fired boiler, constructed in 1987, identified as EU-05, exhausting to stack/vent ID 065 with a production capacity of 30,000 pounds per hour of steam.
- (f) One (1) 11.33 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1992, identified as Emergency Generator #51 (**EU-06**), exhausting to stack/vent ID 4306.
- (g) One (1) 11.33 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1992, identified as Emergency Generator #62 (**EU-07**), exhausting to stack/vent ID 4407.
- ~~(g) One (1) Joy Technologies medical and general waste incinerator, constructed in 1989, identified as EU-07 exhausting to stack/vent 07, with input capacity of 1500 pounds per hour, with no control. Burns medical infectious waste, general waste, cardboard waste, and food services waste. Has two chambers; chamber one operated at 1420-1650 degrees and chamber two operates at 1950 degrees.~~
- (h) **One (1) fuel oil fired emergency generator, identified as Emergency Generator #3 (EU-08), with a maximum capacity of 13.6 MMBtu/hr and exhausting to stack 8.**

A.3 ~~Specifically Regulated~~ Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- ~~———— (a) One (1) 1.71 mmBtu Superior natural gas and Number 2 fuel oil fired boiler, constructed in 1989, identified as EU-05, exhausting to stack/vent ID-06.~~
- (ba) One (1) 5.3 mmBtu H.B. Smith natural gas and Number 2 fuel oil fired boiler constructed in 1985, identified as EU-089, exhausting to stack/vent ID-0809. [326 IAC 6-2-4]
- ~~———— (c) One (1) 6.95 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1971, identified as Emergency Generator #1, exhausting to stack/vent ID-09.~~
- ~~———— (d) One (1) 6.95 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1971, identified as Emergency Generator #2, exhausting to stack/vent ID-10.~~
- ~~———— (e) One (1) 6.95 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1981, identified as Emergency Generator #3, exhausting to stack/vent ID-11.~~
- ~~———— (f) One (1) 7.08 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1985, identified as Emergency Generator #4, exhausting to stack/vent ID-12.~~
- (gb) One (1) 2.96 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1985, identified as Emergency Generator #74 (EU-10), exhausting to stack/vent ID 4510.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions:

- (a) One (1) 29.2 mmBtu Zurn natural gas and Number 2 fuel oil fired boiler, constructed in 1971, identified as EU-01, exhausting to stack/vent ID 01 with a production capacity of 24,000 pounds per hour of steam.
- (b) One (1) 29.2 mmBtu Zurn natural gas and Number 2 fuel oil fired boiler, constructed in 1971, identified as EU-02, exhausting to stack/vent ID 02 with a production capacity of 24,000 pounds per hour of steam.
- (c) One (1) 35.5 mmBtu Zurn natural gas and Number 2 fuel oil fired boiler, constructed in 1987, identified as EU-03, exhausting to stack/vent ID 03 with a production capacity of 30,000 pounds per hour of steam.
- (d) ~~One (1) 11.25 mmBtu Superior Waste Gas and Number 2 fuel oil fired boiler, constructed in April 1989, identified as EU-04, exhausting to stack/vent ID 04 and 05 with a production capacity of 7,488 pounds per hour of steam.~~ **One (1) steam boiler, identified as EU-04, capable of burning natural gas and #2 fuel oil, with a maximum capacity of 34.8 MMBtu/hr when burning #2 fuel oil and 36.5 MMBtu/hr when burning natural gas, with a low NOx burner, and exhausting to stack 04.**
- (e) One (1) 35.5 mmBtu Zurn natural gas and Number 2 fuel oil fired boiler, constructed in 1993, identified as EU-05, exhausting to stack/vent ID 065 with a production capacity of 30,000 pounds per hour of steam.
- (f) One (1) 11.33 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1992, identified as Emergency Generator #51 (**EU-06**), exhausting to stack/vent ID 4306.
- (g) One (1) 11.33 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1992, identified as Emergency Generator #6 2 (**EU-07**), exhausting to stack/vent ID 44 07.
- (h) **One (1) fuel oil fired emergency generator, identified as Emergency Generator #3 (EU-08), with a maximum capacity of 13.6 MMBtu/hr and exhausting to stack 08.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 SO₂ Emissions Limitations [326 IAC 7-1.1-2(a)(3)] [40 CFR 60, Subpart Dc] [40 CFR 60, Subpart A]

- (a) Pursuant to 326 IAC 7-1.1-2(a)(3) (SO₂ Emissions Limitations) The SO₂ emissions from the ~~five~~ natural gas and Number 2 fuel oil fired boilers identified as EU-01, EU-02, EU-03, EU-04, **and** EU-05, ~~EU-08 and emergency generators identified as Emergency Generator #5 and Emergency Generator #6~~ shall not exceed five tenths (0.5) pounds per million Btu heat input; ~~or the sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight.~~

- (b) Pursuant to ~~40 CFR 60 Subpart Dc~~, the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction for EU-05. The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12, apply to EU-04 except when otherwise specified in 40 CFR 60, Subpart Dc.
- (c) Pursuant to 40 CFR 60.42c(d), the SO₂ emissions from EU-04 and EU-05 shall not exceed five tenths (0.5) pounds per million Btu heat input or the sulfur content of the fuel oil shall not exceed five-tenths percent (0.5%) by weight. Pursuant to 40 CFR 60.42c(i), the fuel oil sulfur content limit applies at all times, including periods of startup, shutdown, and malfunction.
- (d) Pursuant to 40 CFR 60.43c(c), emissions from EU-04 and EU-05 are limited to twenty percent (20%) opacity (6 minute averages) except for one six (6) minute period per hour of not more than twenty seven percent (27%) opacity. Pursuant to 40 CFR 60.43c(d), this opacity standard applies at all times, including periods of startup, shutdown, and malfunction.

D.1.2 Particulate Matter [326 IAC 6-1-12]

Pursuant to 326 IAC 6-1-12 (Particulate Rules) the PM emissions from each of the three (3) Zurn natural gas and Number 2 fuel oil fired boilers identified as EU-01, EU-02, EU-03 shall **each** be limited as follows:

- a) 0.011 pounds per million Btu (lbs/mmBtu) heat input
- b) ~~736 million cubic feet per year (mcf/yr) throughput of natural gas per 12 consecutive month period or it's distillate fuel oil equivalent, which is 5544 kgal/yr.~~ 0.7 tons per year of PM.

~~These limits are equivalent to 0.7 tons per year of PM.~~

D.1.3 Particulate Matter [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating):

- (a) The Particulate Matter (PM) emissions from the ~~41.25 million Btu per hour boiler, identified as EU-04, shall be limited to 0.03 pounds per million Btu of heat input~~ **EU-04 shall be limited to 0.2862 pounds per MMBtu of heat input.**
- (b) The Particulate Matter (PM) emissions from the 35.5 million Btu per hour boiler, identified as EU-05, shall be limited to 0.03 pounds per million Btu of heat input (mmBtu/hr) heat input.

This limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input
Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

D.1.4 Opacity [40 CFR Part 60.43c]

~~Pursuant to 40 CFR Part 60.43c, EU-05 shall not discharge into the atmosphere any gases that~~

~~exceeds 20% opacity.~~

D.1.54 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for EU-05 and **EU-04**.

Compliance Determination Requirements

D.1.65 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or ERMD, compliance with the PM limits specified in Condition D.1.2, D.1.3, shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.76 Sulfur Dioxide Emissions and Sulfur Content

Compliance with condition D.1.1(a) and (c) shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the fuel oil sulfur content does not exceed five-tenths percent (0.5%) by weight by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a certification;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling; or
 - (3) Complying with the fuel usage limit
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.7 Opacity Monitoring under 40 CFR 60, Subpart Dc

The Permittee shall only burn distillate fuel oil (fuel oil #1 or #2) in EU-04 and EU-05 such that the requirement to install, maintain and operate CEMS is not applicable.

D.1.8 Visible Emissions Notations

- (a) ~~Daily visible emission notations (when combusting No. 2 fuel) of the stack exhausts for all emission units covered in this section shall be performed during normal daylight operations when exhausting to the atmosphere.~~ **Visible emission notations of the EU-01, EU-02, EU-03, EU-04, and EU-05 stack exhaust shall be performed once per shift during normal daylight operations while combusting fuel oil.** A trained employee shall

record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. **Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.**

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(a) and (c), the Permittee shall maintain records in accordance with (1) through (6) below for **EU-01, EU-02, EU-03, EU-04, and EU-05**. Note that pursuant to 40 CFR 60 Subpart Dc, the fuel oil sulfur limit applies at all times for EU-05 and EU-04 including periods of startup, shutdown, and malfunction.

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual fuel oil and natural gas usage since last compliance determination period and equivalent sulfur dioxide emissions;
- (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period; and

If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, the following shall be maintained:

- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- ~~(a) Fuel usage records for emission units EU-01, EU-02, and EU-03.~~
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain records of daily visible emission notations of the stack exhausts for all emission units covered in this section.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A semi-annual summary of the information to document compliance with Condition D.1.1 (Report fuel usage to show compliance with 40 CFR 60, Subpart Dc), Condition D.1.2 and the natural gas fired boiler certification, shall be submitted to the address listed in Section C - General Reporting Requirements, using the forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported.

~~SECTION D.2 FACILITY OPERATION CONDITIONS~~

~~Facility Description [326 IAC 2-7-5(15)] The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions:~~

- ~~(a) One (1) Joy Technologies medical and general waste incinerator, constructed in 1989, identified as EU-07 exhausting to stack/vent 07, with input capacity of 1500 pounds per hour, with no control. Burns medical infectious waste, general waste, cardboard waste, and food services waste. Has two chambers; chamber one operated at 1420-1650 degrees and chamber two operates at 1950 degrees.~~

~~Emission Limitations and Standards [326 IAC 2-7-5(1)]~~

~~D.2.1 Burning Regulations for Incinerators (PM) [326 IAC 4-2]~~

~~Pursuant to 326 IAC 4-2-2, Burning Regulations for Incinerators, the medical and general waste incinerator identified as EU-07, shall:~~

- ~~(a) Consist of primary and secondary chambers or the equivalent.~~
~~(b) Be equipped with a primary burner unless burning wood products.~~
~~(c) Comply with 326 IAC 5-1(Opaicity limitations).~~
~~(d) Be maintained properly as specified by the manufacturer and approved by IDEM.~~
~~(e) Be operated according to the manufacturer's recommendation and only burn waste approved by IDEM.~~
~~(f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators.~~
~~(g) Be operated so that emissions of hazardous materials including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented.~~
~~(h) Not create a nuisance or a fire hazard.~~
~~(i) Not emit particulate matter in excess of three tenths (0.3) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air.~~

~~The operation of the incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements.~~

~~D.2.2 Carbon Monoxide [326 IAC 9-1-2]~~

~~Pursuant to 326 IAC 9-1-2(3), Carbon Monoxide emission limits for refuse incineration and burning equipment, the Joy Technologies medical and general waste incinerator, identified as EU-07 exhausting to stack/vent 07, with input, shall not discharge carbon monoxide unless the waste gas stream is burned in a direct flame afterburner or is controlled by other means approved by the commissioner.~~

~~D.2.3 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]~~

~~_____ The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in this section except when otherwise specified in 40 CFR 60, Subpart Gc.~~

~~D.2.4 Hospital/Medical/Infectious Waste Incinerators [326 IAC 11-6]~~

~~_____ (a) The medical waste incinerator is subject to 326 IAC 11-6 and 40 CFR 60, Subpart Gc with a compliance date of one year after the effective date of the rule, unless the facility is undergoing retrofit to come into compliance where compliance is required no later than March 31, 2002.~~

~~_____ (b) Pursuant to 326 IAC 11-6 and 40 CFR 60, Subpart Gc, the medical waste incinerator shall comply with the following emission limits:~~

~~_____ (1) Particulate Matter emissions shall not exceed 0.015 grains per dry standard cubic foot;~~

~~_____ Compliance with this condition satisfies the requirements of 326 IAC 6-2-4~~

~~_____ (2) Carbon Monoxide emissions shall not exceed 40 parts per million by volume;~~

~~_____ (3) Dioxins/furans shall not exceed 55 grains per billion dry standard cubic feet total dioxins/furans or 1.0 grains per billion dry standard cubic feet toxic equivalent quantity (TEQ);~~

~~_____ (4) Hydrogen chloride emissions shall not exceed 100 parts per million by volume or a 93% reduction;~~

~~_____ (5) Sulfur dioxide emissions shall not exceed 55 parts per million by volume;~~

~~_____ (6) Nitrogen oxide emissions shall not exceed 250 parts per million by volume;~~

~~_____ (7) Lead emissions shall not exceed 0.52 grains per thousand dry standard cubic feet or a 70% reduction;~~

~~_____ (8) Cadmium emissions shall not exceed 0.07 grains per thousand dry standard cubic feet or a 65% reduction;~~

~~_____ (9) Mercury emissions shall not exceed 0.24 grains per thousand dry standard cubic feet or a 85% reduction;~~

~~_____ (10) Discharge into the atmosphere of any gases shall not exceed ten percent (10%) opacity.~~

~~D.2.5 Operator Training and Qualification Requirements [326 IAC 11-6-5]~~

~~_____ The medical waste incinerator shall not operate at any time unless a fully trained and qualified Hospital/Medical/Infectious Waste Incinerator (HMIWI) operator is accessible either at the facility or available within one (1) hour. The following documentation shall be maintained at the facility and an initial review of the information with each HMIWI operator shall be conducted within one (1) year after the effective date of this rule and annually, thereafter:~~

~~_____ (a) Summary of the applicable standards;~~

~~_____ (b) Description of basic combustion theory applicable to an HMIWI;~~

~~_____ (c) Procedures for receiving, handling, and charging waste;~~

- ~~_____ (d) _____ HMIWI startup, shutdown and malfunction procedures;~~
- ~~_____ (e) _____ Procedures for maintaining proper combustion air supply levels;~~
- ~~_____ (f) _____ Procedures for operating the HMIWI and associated air pollution control systems;~~
- ~~_____ (g) _____ Procedures for responding to periodic malfunction or conditions that may lead to malfunction;~~
- ~~_____ (h) _____ Procedures for monitoring HMIWI emissions;~~
- ~~_____ (i) _____ Reporting and record keeping;~~
- ~~_____ (j) _____ Procedures for handling ash.~~

~~D.2.6 Waste Management Plan [326 IAC 11-6-6]~~

~~1. Pursuant to 326 IAC 11-6-6 and 40 CFR 60.55c, the Permittee shall prepare a waste management plan (WMP).~~

- ~~_____ (a) _____ The WMP must identify both the feasibility and approach to separate certain components of solid waste from the health care waste stream, in order to reduce the amount of toxic emissions from incinerated waste.~~
- ~~_____ (b) _____ The WMP may include, but is not limited to:
 - ~~_____ (i) _____ elements such as paper, cardboard, plastics, glass, battery, or metal recycling; or~~
 - ~~_____ (ii) _____ purchasing recycled or recycle products.~~~~
- ~~_____ (c) _____ The WMP may include different goals or approaches for different areas or departments of the facility and need not include new waste management goals for every waste stream.~~
- ~~_____ (d) _____ The WMP should identify, where possible:
 - ~~_____ (i) _____ reasonably available additional waste management measures;~~
 - ~~_____ (ii) _____ taking into account the effectiveness of waste management measures already in place;~~
 - ~~_____ (iii) _____ the cost of additional measures;~~
 - ~~_____ (iv) _____ the emission reductions expected to be achieved, and~~
 - ~~_____ (v) _____ any other environmental or energy impacts they might have.~~~~
- ~~_____ (e) _____ The American Hospital Association publication entitled "An Ounce of Prevention: Waste Reduction Strategies" shall be considered in the development of the WMP.~~

~~2. Additional Requirements:~~

- ~~_____ (a) _____ The WMP shall address proper waste segregation.~~
- ~~_____ (b) _____ The WMP shall address the management of each waste stream to assure that the Permittee is in compliance with local, state, and federal waste management rules.~~
- ~~_____ (c) _____ The WMP shall address proper management of all mercury-containing items.~~
- ~~_____ (d) _____ The WMP shall identify all items that could become mercury-containing wastes.~~
- ~~_____ (e) _____ Mercury-containing items that must be included and identified, at a minimum, are:
 - ~~_____ (i) _____ Mercury-containing thermometers (silver-colored liquid inside)~~
 - ~~_____ (ii) _____ Mercury-containing thermostats (non-electronic)~~
 - ~~_____ (iii) _____ Fluorescent and other mercury vapor lighting~~~~

- ~~(high intensity discharge - HID, metal halide, high pressure sodium and neon bulbs)~~
- ~~(iv) Gauges, such as barometers, manometers, blood pressure and vacuum gauges with silver-colored liquid~~
- ~~(v) Batteries (mercuric oxide and some alkaline batteries)~~
- ~~(vi) Paint (latex manufactured before 1990, and some oil base paints; the Permittee shall check with manufacturer)~~
- ~~(vii) Thimerosal or merbromin (in some antibacterial products)~~
- ~~(viii) Elemental mercury (from laboratories)~~
- ~~(ix) Esophageal Dilators~~
- ~~(x) Laboratory fixatives~~
- ~~(xi) Tilt switches and other equipment that contains mercury~~
- ~~(f) The WMP shall include plans to eliminate, where possible, all mercury-containing items from the waste stream of the incinerator.~~
- ~~(g) The WMP shall address the training of all affected staff on proper waste management practices of mercury-containing items and other solid, hazardous and medical waste items.~~
- ~~(g) The Permittee shall have WMPs in place for all facilities or hospitals owned or operated by the Permittee that are sending waste to this incinerator. Each WMP shall comply with all requirements of this condition.~~

D.2.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

~~A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.~~

Compliance Determination Requirements

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 11-6-7]

- ~~(a) Pursuant to 326 IAC 11-6 and 40 CFR 60, Subpart Cc, an initial performance test to demonstrate compliance with Condition D.2.4 must be conducted no later than March 31st 2002. Compliance shall be determined according to 326 IAC 3-6 concerning source sampling procedures and 40 CFR 60, Subpart Ec, Section 60.56c, excluding the fugitive emissions testing requirements under Section 60.56c(b)(12) and 60.56(c)(3).~~
- ~~(b) Pursuant to 40 CFR 60.56c(e)(2) and (3), annual performance testing to demonstrate compliance with the PM, CO, HCL and opacity emission limits established in D.2.4 shall be performed annually (no more than 12 months following the previous performance test) using the applicable procedures and test methods listed in 40 CFR 60.56c(b).~~
- ~~(1) If all three performance tests over a 3-year period indicate compliance with the emission limit for a pollutant (PM, CO, or HCL), the owner or operator may forego a performance test for that pollutant for the subsequent 2 years.~~
 - ~~(i) At a minimum, a performance test for PM, CO, and HCL shall be conducted every third year (no more than 36 months following the previous performance test).~~
 - ~~(ii) If a performance test conducted every third year indicates compliance with the emission limit for a pollutant (PM, CO, or HCL), the owner or operator may forego a performance test for that pollutant for an additional 2 years.~~
 - ~~(iii) If any performance test indicates noncompliance with the respective~~

~~emission limit, a performance test for that pollutant shall be conducted annually until all annual performance tests over a 3-year period indicate compliance with the emission limit.~~

~~(2) The use of the bypass stack during a performance test shall invalidate the performance test.~~

~~(c) IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance shall be determined by a performance test conducted in accordance with Section C - Performance Testing.~~

~~D.2.9 Compliance Date [326 IAC 11-6-9]~~

~~Pursuant to 326 IAC 11-6-9, the source shall install the necessary air pollution control equipment and be in compliance with all provisions of this rule no later than March 31, 2002, provided the following measurable and enforceable incremental steps of progress are taken:~~

- ~~(a) Submit a final control plan no later than June 30, 1999 (already submitted);~~
- ~~(b) Award contracts for emissions control systems or for process modifications, or issuance of orders for the purchase of component parts to accomplish emission control or process modifications no later than March 31, 2000;~~
- ~~(c) Initiate on-site construction or installation of emission control equipment or process change no later than March 31, 2001;~~
- ~~(d) Complete on-site construction or installation of emission control equipment or process change no later than September 30, 2001;~~
- ~~(e) Be in final compliance no later than March 31, 2002.~~
- ~~(f) The source shall be in compliance with the operator training and qualification requirements within one (1) year after the effective date of this rule.~~

~~Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

~~D.2.10 Monitoring [326 IAC 11-6-7]~~

- ~~(a) Compliance monitoring shall be performed according to 40 CFR 60.57c, based on the type of control equipment installed.~~
- ~~(b) The Permittee shall obtain monitoring data at all times during HMIWI operation except during periods of monitoring equipment malfunction, calibration, or repair. At a minimum, valid monitoring data shall be obtained for 75 percent of the operating hours per day and for 90 percent of the operating days per calendar quarter that the affected facility is combusting hospital, medical and/or infectious waste.~~

~~D.2.11 Visible Emissions Notations~~

- ~~(a) Daily visible emission notations of the medical waste incinerator stack exhaust, WDS-01, shall be performed during normal daylight operations until the final compliance date of March 31, 2002. A trained employee shall record whether emissions are normal or abnormal.~~
- ~~(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty (80) percent of the time the process is in operation, not counting startup or shut down time.~~
- ~~(c) In the case of batch or discontinuous operations, reading shall be taken during that part of~~

~~the operation that would normally be expected to cause the greatest emissions:~~

- ~~_____ (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process:~~
- ~~_____ (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed:~~

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.12 Record Keeping Requirements

- ~~_____ (a) To document compliance with Condition D.2.4, the Permittee shall maintain information on site for a period of at least 5 years sufficient to establish compliance with 40 CFR 60.58c, based on the control equipment installed:~~
- ~~_____ (b) To document compliance with Condition D.2.11, the Permittee shall maintain records of daily visible emission notations of the incinerator stack exhaust, EU-07, until the final compliance date of March 31, 2002.~~

D.2.13 Reporting Requirements

- ~~_____ (a) The Permittee shall submit a final control plan no later than June 30, 1999 (already submitted):~~
- ~~_____ (b) The Permittee shall submit the following information no later than 60 days following the initial performance test:

_____ (1) The initial performance test data;
_____ (2) The values for the site-specific operating parameters, as applicable [40 CFR 60.56c(d) or (i)];
_____ (3) The waste management plan.~~
- ~~_____ (c) Upon the compliance date, the Permittee must submit a semi-annual report, including the following information:
_____ (1) The values for the site-specific operating parameters, as applicable;
_____ (2) The highest maximum operating parameter and the lowest operating parameter, as applicable, for the year being reported;
_____ (3) The highest maximum operating parameter and the lowest operating parameter as applicable, for the year preceding the year being reported;
_____ (4) Identification of calendar days, times, description and durations of malfunctions; calendar days of emission rates or operating parameters not measured and the reason; and calendar days of emissions rates or operating parameters exceeding the applicable limits; for the year being reported;
_____ (5) Identification of calendar days, times, description and durations of malfunctions; calendar days of emission rates or operating parameters not measured and the reason; and calendar days of emissions rates or operating parameters exceeding~~

~~the applicable limits; for the preceding year being reported;~~

~~_____ (6) If a performance test was conducted during the reporting period, the results of that test;~~

~~_____ (7) If no exceedances or malfunctions were reported for the calendar year being reported, a statement that no exceedances occurred during the reporting period;~~

~~_____ (8) Any use of the bypass stack, the duration, reason for malfunction and corrective action taken;~~

~~_____ (d) The reports required in (a), (b) and (c) of this condition shall be submitted to the address listed in Section C - General Reporting Requirements.~~

SECTION D.32 FACILITY OPERATION CONDITIONS - Insignificant Activities

Facility Description [326 IAC 2-7-5(15)] The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions:

- ~~(a) One (1) 1.71 mmBtu Superior natural gas and Number 2 fuel oil fired boiler, constructed in 1989, identified as EU-05, exhausting to stack/vent ID 06.~~
- ~~(b) One (1) 5.3 mmBtu H.B. Smith natural gas and Number 2 fuel oil fired boiler constructed in 1985, identified as EU-089, exhausting to stack/vent ID 089.~~
- (b) One (1) 2.96 mmBtu Caterpillar Number 2 fuel oil fired emergency generator, constructed in 1985, identified as Emergency Generator #74 (EU-10), exhausting to stack/vent ID 4510.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.32.1 Particulate Matter [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating):

- (a) The Particulate Matter (PM) emissions from the boiler identified as EU-089 shall be limited to 0.03 pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input

The limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input
Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

Compliance Determination Requirements

D.32.2 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM and ~~ERM~~ OES may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM or ~~OES ERM~~ OES, compliance shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 097-17256-00129 and the attached Part 70 Significant Permit Revision No. 097-17919-00129.

**Appendix A: Emissions Calculations
Emission Summary**

Company Name:	Saint Vincent Hospital Indianapolis
Address, City IN Zip:	2001 West 86th Street
TV Permit No.:	T097-7469-00129
Mod No.:	97-17256-129
Reviewer:	Amanda Hennessy
Date:	July, 2003

MMBtu/hr	Pollutant					
	PM*	PM-10	SO2	NOx	VOC	CO
Boiler EU -04						
Natural Gas 36.5	1.2	1.20	0.1	8.0	0.90	13.4
#2 Fuel Oil 34.8	2.2	1.2	77.3	21.8	0.4	5.4
Worst Case	2.2	1.2	77.3	21.8	0.9	13.4
Emergency Generator #4	1.1	1.1	1	15	1.2	3.2
TOTAL NEW EMISSIONS	3.3	2.3	78.3	36.8	2.1	16.6

Appendix A: Emissions Calculations
One Boiler rated at 34.8 MMBtu/hr when burning #2 Fuel Oil

Company Name: Saint Vincent Hospital Indianapolis
Address, City IN Zip: 2001 West 86th Street
TV Permit No.: T097-7469-00129
Mod No.: 97-17256-129
Reviewer: Amanda Hennessy
Date: July, 2003

EU-04
Heat Input Capacity MMBtu/hr Potential Throughput kgals/year S = Weight % Sulfur
34.8 2177.485714 0.50

Emission Factor in lb/kgal	Pollutant					
	PM*	PM-10	SO2	NOx	VOC	CO
	2.0	1.08	71 (142.0S)	20.0	0.34	5.0
Potential Emission in tons/yr	2.2	1.2	77.3	21.8	0.4	5.4

HAPs - Metals

Emission Factor in lb/MMBtu	Arsenic	Copper	Beryllium	Cadmium	Chromium	Lead
	4.0E-06	6.0E-06	3.0E-06	3.0E-06	3.0E-06	9.0E-06
Potential Emission in tons/yr	6.10E-04	9.15E-04	4.57E-04	4.57E-04	4.57E-04	1.37E-03

HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury	Zinc	Manganese	Nickel	Selenium
	3.0E-06	4.0E-06	6.0E-06	3.0E-06	1.5E-05
Potential Emission in tons/yr	4.57E-04	6.10E-04	9.15E-04	4.57E-04	2.29E-03

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions HAPs (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, 1.3-3, and 1.3-7 (SCC 1-03-005-01/02/03), Supplement E 9/98

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 10**

Company Name: Saint Vincent Hospital
Address City IN Zip: 2001 West 86th Street
TV Permit No.: T97-7469-129
Mod No.: 097-17256-00129
Reviewer: Amanda Hennessy
Date: July, 2003

EU-04

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

36.5

319.7

	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	7.6	7.6	0.6	50.0	5.5	84.0
Potential Emission in tons/yr	1.2	1.2	0.1	8.0	0.9	13.4

Methodology

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 50, Flue gas recirculation = 32

Emission Factors for CO: uncontrolled = 84, Low NOx Burner = 84, Flue gas recirculation = 84

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-03-006-03

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Appendix A: Emission Calculations
Emergency Generator #4
500 hours per year operation**

Company Name: Saint Vincent Hospital
Address City IN Zip: 2001 West 86th Street
TV Permit No.: T97-7469-129
Mod No.: 097-17256-00129
Reviewer: Amanda Hennessy
Date: July, 2003

Heat Input Capacity
MMBtu/hr

13.6

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMBtu	0.31	0.31	0.29	4.41	0.35	0.95
Potential Emission in tons/yr	1.1	1.1	1.0	15.0	1.2	3.2

Methodology

Potential Emissions (tons per year) = Heat input capacity (MMBtu/hr) * Emission Factor (lb/MMBtu) * 500 hours per year * 1 ton

No emission factor for PM, therefore, the PM10 emission factor was used.